

RESPONSE TO OFFICE ACTION

Serial No. 10/055,310

Page 12 of 40

REMARKS

This is intended as a full and complete response to the Office Action dated April 23, 2003, having a shortened statutory period for response set to expire on July 23, 2003. Please reconsider the claims pending in the application for reasons discussed below.

CLAIM OBJECTIONS

1. Claim 1

Claim 1 is objected to for informalities. In response, the Applicants have amended claim 1 to more clearly recite aspects of the invention. Specifically, claim 1 has been amended to recite a passage having "an inlet and an outlet", replacing "an inlet and outlet". Thus, the Applicants respectfully request that the objection to claim 1 be withdrawn.

2. Claim 30

Claim 30 is objected to for informalities. In response, the Applicants have amended claim 30 so that the claim ends with one period, rather than with two periods. Thus, the Applicants respectfully request that the objection to claim 30 be withdrawn.

CLAIM REJECTIONS

A. 35 U.S.C. §112

Claim 35

Claim 35 stands rejected under 35 U.S.C. §112. In response, the applicants have amended claim 35 to more clearly recite aspects of the invention. Specifically, claim 35 has been amended to recite "a passage" at least partially disposed in at least one of the first or second cylindrical walls, replacing "the passage". Accordingly, the Applicants respectfully request that the rejection to claim 35 be withdrawn.

RESPONSE TO OFFICE ACTION
Serial No. 10/055,310
Page 13 of 40

B. 35 U.S.C. §102(b)

Claims 1-3, 5, 11 and 23

Masuda et al.

1. Claims 1-3 and 5

Claims 1-3 and 5 stand rejected under 35 U.S.C. §102(b) as being unpatentable over United States Patent No. 6,171,438 issued January 9, 2001 to *Masuda et al.* (hereinafter referred to as "*Masuda*"). In response, the Applicants have amended claim 1, from which claims 2-3 and 5 depend, to more clearly recite aspects of the invention.

Masuda does not teach, show or suggest all of the limitations of independent claim 1. *Masuda* teaches a plasma processing chamber having a hollow jacket held adjacent a sidewall for controlling the temperature of the side wall's inner surface so that polymerized material is drawn onto the jacket's surface to form a film. The jacket is coupled to pipe or line that extends from outside of the chamber and through the sidewall to supply a heat-exchanging medium into a hollow space in the jacket. The hollow space is completely surrounded and bounded by the jacket. *Masuda* does not teach, show or suggest a chamber liner having a base for substantially covering a bottom of the chamber, an inner wall connected to the base and a substantially annular passage formed in the base, the inner wall or the base and the inner wall of the liner, the passage being adapted to circulate a fluid therethrough, and wherein the passage is fluidly isolated from the processing volume, as recited by independent claim 1.

Thus, independent claim 1, and claims 2-3 and 5 that depend therefrom, are patentable over *Masuda*. Accordingly, the Applicants respectfully request that the rejection to these claims be withdrawn.

RESPONSE TO OFFICE ACTION

Serial No. 10/055,310

Page 14 of 40

2. Claims 11 and 23

Claims 11 and 23 stand rejected under 35 U.S.C. §102(b) as being unpatentable over *Masuda*. In response, the Applicants have amended claim 11, from which claim 23 depends, to more clearly recite aspects of the invention.

Masuda does not teach, show or suggest all of the limitations of independent claim 11. *Masuda* has been discussed above. *Masuda* does not teach, show or suggest a chamber liner having a base for substantially covering the bottom of a processing chamber and a substantially annular passage formed at least partially in the base, the passage being fluidly isolated from the chamber volume and adapted to circulate a fluid therethrough, as recited by independent claim 11.

Thus, independent claim 11, and claim 23 that depends therefrom, are patentable over *Masuda*. Accordingly, the Applicants respectfully request that the rejection to these claims be withdrawn.

C. 35 U.S.C. §102(b)**Claims 1-3, 5, 7-10 and 36*****Shan et al.*****1. Claims 1-3 and 5**

Claims 1-3 and 5 stand rejected under 35 U.S.C. §102(b) as being unpatentable over European Patent No. EP 0 814 495, published December 29, 1997 to *Shan et al.* (hereinafter referred to as "*Shan*"). In response, the Applicants have amended claim 1, from which claims 2-3 and 5 depend, to more clearly recite aspects of the invention.

Shan does not teach, show or suggest all of the limitations of independent claim 1. *Shan* teaches a plasma processing chamber having a generally cylindrical dielectric cathode shield that extends from a chamber lid and has an annular protrusion which functions as half of an exhaust baffle. A dielectric anode shield is spaced radially inward from the cathode shield and includes a similar annular protrusion that overlaps the protrusion on the cathode shield to form the second half of the baffle. Channels in the side walls of the chamber are

RESPONSE TO OFFICE ACTION

Serial No. 10/055,310

Page 15 of 40

pumped with cool water to control the temperature of the walls. A lid of the chamber has a gas inlet manifold coupled to one or more lines from a gas source, and a gas distribution plate positioned below the manifold to release the process gases into the chamber interior. The cathode shield further includes an arcuate aperture connected to an exhaust port to allow gases to exit the chamber. *Shan* does not teach, show or suggest a chamber liner having a base for substantially covering a bottom of the chamber, an inner wall connected to the base and a substantially annular passage formed in the base, the inner wall or the base and the inner wall of the liner, the passage being adapted to circulate a fluid therethrough, and wherein the passage is fluidly isolated from the processing volume, as recited by independent claim 1.

Thus, independent claim 1, and claims 2-3 and 5 that depend therefrom, are patentable over *Shan*. Accordingly, the Applicants respectfully request that the rejection to these claims be withdrawn.

2. Claims 7-10

Claims 7-10 stand rejected under 35 U.S.C. §102(b) as being unpatentable over *Shan*. In response, the Applicants have amended claim 7, from which claims 8-10 depend, to more clearly recite aspects of the invention.

Shan does not teach, show or suggest all of the limitations of independent claim 1. *Shan* has been discussed above. *Shan* does not teach, show or suggest a chamber liner having a center member with a cylindrical wall projecting upward therefrom and a substantially annular passage formed in the center member, the passage being fluidly isolated from the processing volume, as recited by independent claim 7.

Thus, independent claim 7, and claims 8-10 that depend therefrom, are patentable over *Shan*. Accordingly, the Applicants respectfully request that the rejection to these claims be withdrawn.

RESPONSE TO OFFICE ACTION

Serial No. 10/055,310

Page 16 of 40

3. Claim 36

Claim 36 stands rejected under 35 U.S.C. §102(b) as being unpatentable over *Shan*. In response, the Applicants have amended claim 36 to more clearly recite aspects of the invention.

Shan does not teach, show or suggest all of the limitations of independent claim 36. *Shan* has been discussed above. *Shan* does not teach, show or suggest a chamber liner having a center member for substantially covering the bottom of a chamber, wherein a cylindrical wall is adapted to line at least a portion of the walls of the chamber and is coupled at one end to the center member, and a substantially annular passage is at least partially formed in the center member and is fluidly isolated from the processing region, as recited by claim 36.

Thus, independent claim 36 is patentable over *Shan*. Accordingly, the Applicants respectfully request that the rejection to this claim be withdrawn.

D. 35 U.S.C. §102(a)

Claims 1-3, 5 and 36-37

Pu et al.

1. Claims 1-3 and 5

Claims 1-3 and 5 stand rejected under 35 U.S.C. §102(a) as being unpatentable over PCT Application No. WO 99/48130, issued on August 14 2001 as United States Patent No. 6,273,022 to *Pu et al.* (hereinafter referred to as "*Pu*"). In response, the Applicants have amended claim 1, from which claims 2-3 and 5 depend, to more clearly recite aspects of the invention.

Pu does not teach, show or suggest all of the limitations of independent claim 1. *Pu* teaches a plasma process chamber having inner and outer liners disposed parallel to chamber side walls. The inner and outer liners are spaced apart relative to each other, and each has a lateral extension. The lateral extensions on the inner and outer liners overlap to form an exhaust baffle. The side walls of the chamber include several gas inlet ports for introducing process gases into the chamber, and the outer liner includes a gas passage to provide a

RESPONSE TO OFFICE ACTION

Serial No. 10/055,310

Page 17 of 40

flow of process gases to the inlet ports. *Pu* does not teach, show or suggest a chamber liner having a base for substantially covering a bottom of the chamber, an inner wall connected to the base and a substantially annular passage formed in the base, the inner wall or the base and the inner wall of the liner, the passage being adapted to circulate a fluid therethrough, and wherein the passage is fluidly isolated from the processing volume, as recited by independent claim 1.

Thus, independent claim 1, and claims 2-3 and 5 that depend therefrom, are patentable over *Pu*. Accordingly, the Applicants respectfully request that the rejection to these claims be withdrawn.

2. Claim 36

Claim 36 stands rejected under 35 U.S.C. §102(a) as being unpatentable over *Pu*. In response, the Applicants have amended claim 36 to more clearly recite aspects of the invention.

Pu does not teach, show or suggest all of the limitations of independent claim 36. *Pu* has been discussed above. *Pu* does not teach, show or suggest a chamber liner having a center member for substantially covering the bottom of a chamber, wherein a cylindrical wall is adapted to line at least a portion of the walls of the chamber and is coupled at one end to the center member, and a substantially annular passage is at least partially formed in the center member and is fluidly isolated from the processing region, as recited by claim 36.

Thus, independent claim 36 is patentable over *Pu*. Accordingly, the Applicants respectfully request that the rejection to this claim be withdrawn.

3. Claim 37

Claim 37 stands rejected under 35 U.S.C. §102(a) as being unpatentable over *Pu*. In response, the Applicants have amended claim 37 to more clearly recite aspects of the invention.

Pu does not teach, show or suggest all of the limitations of independent claim 37. *Pu* has been discussed above. *Pu* does not teach, show or suggest a chamber liner having a center member having a first side adapted to be exposed

RESPONSE TO OFFICE ACTION

Serial No. 10/055,310

Page 18 of 40

to the processing region, a cylindrical wall extending from the first side of the center member and adapted to line at least a portion of the walls of the chamber, and a substantially annular passage at least partially disposed in the center member and adapted to isolate a heat transfer fluid flowing therethrough from the processing volume, as recited by independent claim 37.

Thus, independent claim 37 is patentable over *Pu*. Accordingly, the Applicants respectfully request that the rejection to this claim be withdrawn.

E. 35 U.S.C. §103(a)

Claim 4

Masuda in view of Collins et al.

Claim 4 stands rejected under 35 U.S.C. §103(a) as being unpatentable over *Masuda* in view of PCT Patent Application No. WO 97/08734, published March 6, 1997 to *Collins et al.* (hereinafter referred to as "*Collins*"). For the reasons discussed below, the Applicants respectfully disagree with this conclusion.

The burden for establishing a *prima facie* case of obviousness falls on the Examiner. See, MPEP §2142. A basic requirement of establishing a *prima facie* case of obviousness is that the combination of prior art references must teach or suggest all the claim limitations and that there must be a motivation to combine the references. See, MPEP §2143.

Masuda and *Collins* do not, individually or in combination, teach, show or suggest all of the limitations of independent claim 1, from which claim 4 depends. *Masuda* has been discussed above. *Collins* teaches a plasma processing chamber optionally including a cold liner that covers the interior surfaces of a pumping annulus positioned near the bottom of the chamber. The liner is a solid component, having no channels or passages formed therein except for a connection to a pump. The liner is thermally coupled to a cold sink that maintains the temperature of the liner below a polymer condensation temperature so that polymer precursor materials in the chamber deposit on the liner. The combination of *Masuda* and *Collins* does not teach, show or suggest a chamber

RESPONSE TO OFFICE ACTION

Serial No. 10/055,310

Page 19 of 40

liner having a base for substantially covering a bottom of the chamber, an inner wall connected to the base and a substantially annular passage formed in the base, the inner wall or the base and the inner wall of the liner, the passage being adapted to circulate a fluid therethrough, and wherein the passage is fluidly isolated from the processing volume, as recited by independent claim 1.

Thus, independent claim 1, and claim 4 that depends therefrom, are patentable over *Masuda* in view of *Collins*. Accordingly, the Applicants respectfully request that the rejection to this claim be withdrawn.

F. 35 U.S.C. §103(a)

Claim 6

Masuda in view of *Reimold et al.*

Claim 6 stands rejected under 35 U.S.C. §103(a) as being unpatentable over *Masuda* in view of German Patent No. DE 3110489 A1, published October 20, 1982 to *Reimold et al.* (hereinafter referred to as "*Reimold*"). For the reasons discussed below, the Applicants respectfully disagree with this conclusion.

Masuda and *Reimold* do not, individually or in combination, teach, show or suggest all of the limitations of independent claim 1, from which claim 4 depends. *Masuda* has been discussed above. *Reimold* teaches a heat exchanger including bosses for providing a connection for the supply or removal of a heat exchanging medium. The combination of *Masuda* and *Reimold* does not teach, show or suggest a chamber liner having a base for substantially covering a bottom of the chamber, an inner wall connected to the base and a substantially annular passage formed in the base, the inner wall or the base and the inner wall of the liner, the passage being adapted to circulate a fluid therethrough, and wherein the passage is fluidly isolated from the processing volume, as recited by independent claim 1.

Thus, independent claim 1, and claim 6 that depends therefrom, are patentable over *Masuda* in view of *Reimold*. Accordingly, the Applicants respectfully request that the rejection to this claim be withdrawn.

RESPONSE TO OFFICE ACTION
Serial No. 10/055,310
Page 20 of 40G. 35 U.S.C. §103(a)
Masuda

Claims 15-16, 20, 22 and 36-39

1. Claims 15-16, 20 and 22

Claims 15-16, 20 and 22 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Masuda*. In response, the Applicants have amended claim 36, from which claims 15-16, 20 and 22 depend, to more clearly recite aspects of the invention.

Masuda does not teach, show or suggest all of the limitations of independent claim 11. *Masuda* has been discussed above. *Masuda* does not teach, show or suggest a chamber liner having a base for substantially covering the bottom of a processing chamber and a substantially annular passage formed at least partially in the base, the passage being fluidly isolated from the chamber volume and adapted to circulate a fluid therethrough, as recited by independent claim 11.

Thus, independent claim 11, and claims 15-16, 20 and 22 that depend therefrom, are patentable over *Masuda*. Accordingly, the Applicants respectfully request that the rejection to these claims be withdrawn.

2. Claim 36

Claim 36 stands rejected under 35 U.S.C. §103(a) as being unpatentable over *Masuda*. In response, the Applicants have amended claim 36 to more clearly recite aspects of the invention.

Masuda does not teach, show or suggest all of the limitations of independent claim 36. *Masuda* has been discussed above. *Masuda* does not teach, show or suggest a chamber liner having a center member for substantially covering the bottom of a chamber, wherein a cylindrical wall is adapted to line at least a portion of the walls of the chamber and is coupled at one end to the center member, and a substantially annular passage is at least partially formed in

RESPONSE TO OFFICE ACTION

Serial No. 10/055,310

Page 21 of 40

the center member and is fluidly isolated from the processing region, as recited by claim 36.

Thus, independent claim 36 is patentable over *Masuda*. Accordingly, the Applicants respectfully request that the rejection to this claim be withdrawn.

3. Claims 37-39

Claims 37-39 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Masuda*. In response, the Applicants have amended independent claim 37, from which claims 38-39 depend, to more clearly recite aspects of the invention.

Masuda does not teach, show or suggest all of the limitations of independent claim 37. *Masuda* has been discussed above. *Masuda* does not teach, show or suggest a chamber liner having a center member having a first side adapted to be exposed to the processing region, a cylindrical wall extending from the first side of the center member and adapted to line at least a portion of the walls of the chamber, and a substantially annular passage at least partially disposed in the center member and adapted to isolate a heat transfer fluid flowing therethrough from the processing volume, as recited by independent claim 37.

Thus, independent claim 37, and claims 38-39 that depend therefrom, are patentable over *Masuda*. Accordingly, the Applicants respectfully request that the rejection to these claims be withdrawn.

H. 35 U.S.C. §103(a)

Claim 18***Masuda* in view of *Collins***

Claim 18 stands rejected under 35 U.S.C. §103(a) as being unpatentable over *Masuda*. In response, the Applicants have amended claim 11, from which claim 18 depends, to more clearly recite aspects of the invention.

Masuda and *Collins* do not, individually or in combination, teach, show or suggest all of the limitations of independent claim 11. *Masuda* and *Collins* have

RESPONSE TO OFFICE ACTION
Serial No. 10/055,310
Page 22 of 40

been discussed above. *Masuda* and *Collins* do not, individually or in combination, teach, show or suggest a chamber liner having a base for substantially covering the bottom of a processing chamber and a substantially annular passage formed at least partially in the base, the passage being fluidly isolated from the chamber volume and adapted to circulate a fluid therethrough, as recited by independent claim 11.

Thus, independent claim 11, and claim 18 that depends therefrom, are patentable over *Masuda* in view of *Collins*. Accordingly, the Applicants respectfully request that the rejection to this claim be withdrawn.

I. 35 U.S.C. §103(a)

Claim 24

Masuda in view of *Banholzer et al.*

Claim 24 stands rejected under 35 U.S.C. §103(a) as being unpatentable over *Masuda* in view of United States Patent No. 5,565,058, issued October 15, 1996 to *Banholzer et al.* (hereinafter referred to as "*Banholzer*"). In response, the Applicants have amended claim 11, from which claim 24 depends, to more clearly recite aspects of the invention.

Masuda and *Banholzer* do not, individually or in combination, teach, show or suggest all of the limitations of independent claim 11. *Masuda* has been discussed above. *Banholzer* teaches a vacuum chamber in which shield positioned with the chamber is treated to roughen its surface to increase the adhesion of deposited materials. *Masuda* and *Banholzer* do not, individually or in combination, teach, show or suggest a chamber liner having a base for substantially covering the bottom of a processing chamber and a substantially annular passage formed at least partially in the base, the passage being fluidly isolated from the chamber volume and adapted to circulate a fluid therethrough, as recited by independent claim 11.

RESPONSE TO OFFICE ACTION
Serial No. 10/055,310
Page 23 of 40

Thus, independent claim 11, and claim 24 that depends therefrom, are patentable over *Masuda* in view of *Banholzer*. Accordingly, the Applicants respectfully request that the rejection to this claim be withdrawn.

J. 35 U.S.C. §103(a)

Claim 4

Shan in view of *Collins*

Claim 4 stands rejected under 35 U.S.C. §103(a) as being unpatentable over *Shan* in view of *Collins*. For the reasons discussed below, the Applicants respectfully disagree with this conclusion.

Shan and *Collins* do not, individually or in combination, teach, show or suggest all of the limitations of independent claim 1, from which claim 4 depends. *Shan* and *Collins* have been discussed above. The combination of *Shan* and *Collins* does not teach, show or suggest a chamber liner having a base for substantially covering a bottom of the chamber, an inner wall connected to the base and a substantially annular passage formed in the base, the inner wall or the base and the inner wall of the liner, the passage being adapted to circulate a fluid therethrough, and wherein the passage is fluidly isolated from the processing volume, as recited by independent claim 1.

Thus, independent claim 1, and claim 4 that depends therefrom, are patentable over *Shan* in view of *Collins*. Accordingly, the Applicants respectfully request that the rejection to this claim be withdrawn.

K. 35 U.S.C. §103(a)

Claims 11, 15-17, 20 and 22-23

Shan in view of *Masuda*

Claims 11, 15-17, 20 and 22-23 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Shan* in view of *Masuda*. For the reasons discussed below, the Applicants respectfully disagree with this conclusion.

Shan and *Masuda* do not, individually or in combination, teach, show or suggest all of the limitations of independent claim 11, from which claims 15-17,

RESPONSE TO OFFICE ACTION
Serial No. 10/055,310
Page 24 of 40

20 and 22-23 depend. *Shan* and *Masuda* have been discussed above. The combination of *Shan* and *Masuda* does not teach, show or suggest a chamber liner having a base for substantially covering the bottom of a processing chamber and a substantially annular passage formed at least partially in the base, the passage being fluidly isolated from the chamber volume and adapted to circulate a fluid therethrough, as recited by independent claim 11.

Thus, independent claim 11, and claims 15-17, 20 and 22-23 that depend therefrom, are patentable over *Shan* in view of *Masuda*. Accordingly, the Applicants respectfully request that the rejection to these claims be withdrawn.

L. 35 U.S.C. §103(a) Claims 12, 14, 21, 25-26, 28-31 and 33-35
Shan* in view of *Masuda* and further in view of *Collins

1. Claims 12, 14 and 21

Claims 12, 14 and 21 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Shan* in view of *Masuda* and further in view of *Collins*. For the reasons discussed below, the Applicants respectfully disagree with this conclusion.

Shan, *Masuda* and *Collins* do not, individually or in combination, teach, show or suggest all of the limitations of independent claim 11, from which claims 12, 14 and 21 depend. *Shan*, *Masuda* and *Collins* have been discussed above. The combination of *Shan*, *Masuda* and *Collins* does not teach, show or suggest a chamber liner having a base for substantially covering the bottom of a processing chamber and a substantially annular passage formed at least partially in the base, the passage being fluidly isolated from the chamber volume and adapted to circulate a fluid therethrough, as recited by independent claim 11.

Thus, independent claim 11, and claims 12, 14 and 21 that depend therefrom, are patentable over *Shan* in view of *Masuda* and further in view of *Collins*. Accordingly, the Applicants respectfully request that the rejection to these claims be withdrawn.

RESPONSE TO OFFICE ACTION
Serial No. 10/055,310
Page 25 of 40

2. Claims 25-26 and 28-31

Claims 25-26 and 28-31 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Shan* in view of *Masuda* and further in view of *Collins*. In response, the Applicants have amended claim 25, from which claims 26 and 28-31 depend, to more clearly recite aspects of the invention.

Shan, *Masuda* and *Collins* do not, individually or in combination, teach, show or suggest all of the limitations of independent claim 25. *Shan*, *Masuda* and *Collins* have been discussed above. The combination of *Shan*, *Masuda* and *Collins* does not teach, show or suggest a liner having an annular base for substantially covering the bottom of a processing chamber, wherein a first cylindrical wall extends from a perimeter of the base and a substantially annular passage is formed at least partially in the base, as recited by independent claim 25.

Thus, independent claim 25, and claims 6 and 28-31 that depend therefrom, are patentable over *Shan* in view of *Masuda* and further in view of *Collins*. Accordingly, the Applicants respectfully request that the rejection to these claims be withdrawn.

3. Claims 33-35

Claims 33-35 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Shan* in view of *Masuda* and further in view of *Collins*. In response, the Applicants have amended claim 33, from which claims 34-35 depend, to more clearly recite aspects of the invention.

Shan, *Masuda* and *Collins* do not, individually or in combination, teach, show or suggest all of the limitations of independent claim 33. *Shan*, *Masuda* and *Collins* have been discussed above. The combination of *Shan*, *Masuda* and *Collins* does not teach, show or suggest a chamber liner having an annular base for substantially covering the bottom of a chamber, a first cylindrical wall coupled to an outer portion of the base for extending into the processing region along the sidewalls of the chamber, a second cylindrical wall coupled to an inner portion of the base for extending into the processing region along a substrate support

RESPONSE TO OFFICE ACTION

Serial No. 10/055,310

Page 26 of 40

positioned therein, and a substantially annular passage formed at least partially in the base and fluidly isolated from the processing region, as recited by independent claim 33.

Thus, independent claim 33, and claims 34-35 that depend therefrom, are patentable over *Shan* in view of *Masuda* and further in view of *Collins*. Accordingly, the Applicants respectfully request that the rejection to these claims be withdrawn.

M. 35 U.S.C. §103(a)**Claims 6, 13 and 27**

Shan in view of *Masuda* and *Collins* and further in view of *Reimold*

1. Claim 6

Claim 6 stands rejected under 35 U.S.C. §103(a) as being unpatentable over *Shan* in view of *Masuda* and *Collins* and further in view of *Reimold*. In response, the Applicants have amended claim 1, from which claim 6 depends, to more clearly recite aspects of the invention.

Shan, *Masuda*, *Collins* and *Reimold* do not, individually or in combination, teach, show or suggest all of the limitations of independent claim 1. *Shan*, *Masuda*, *Collins* and *Reimold* have been discussed above. The combination of *Shan*, *Masuda*, *Collins* and *Reimold* does not teach, show or suggest a chamber liner having a base for substantially covering a bottom of the chamber, an inner wall connected to the base and a substantially annular passage formed in the base, the inner wall or the base and the inner wall of the liner, the passage being adapted to circulate a fluid therethrough, and wherein the passage is fluidly isolated from the processing volume, as recited by independent claim 1.

Thus, independent claim 1, and claim 6 that depends therefrom, are patentable over *Shan* in view of *Masuda* and *Collins* and further in view of *Reimold*. Accordingly, the Applicants respectfully request that the rejection to this claim be withdrawn.

RESPONSE TO OFFICE ACTION
Serial No. 10/055,310
Page 27 of 40

2. Claim 13

Claim 13 stands rejected under 35 U.S.C. §103(a) as being unpatentable over *Shan* in view of *Masuda* and *Collins* and further in view of *Reimold*. In response, the Applicants have amended claim 11, from which claim 13 depends, to more clearly recite aspects of the invention.

Shan, Masuda, Collins and *Reimold* do not, individually or in combination, teach, show or suggest all of the limitations of independent claim 1. *Shan, Masuda, Collins* and *Reimold* have been discussed above. The combination of *Shan, Masuda, Collins* and *Reimold* does not teach, show or suggest a chamber liner having a base for substantially covering the bottom of a processing chamber and a substantially annular passage formed at least partially in the base, the passage being fluidly isolated from the chamber volume and adapted to circulate a fluid therethrough, as recited by independent claim 11.

Thus, independent claim 11, and claim 13 that depends therefrom, are patentable over *Shan* in view of *Masuda* and *Collins* and further in view of *Reimold*. Accordingly, the Applicants respectfully request that the rejection to this claim be withdrawn.

3. Claim 27

Claim 27 stands rejected under 35 U.S.C. §103(a) as being unpatentable over *Shan* in view of *Masuda* and *Collins* and further in view of *Reimold*. In response, the Applicants have amended claim 25, from which claim 27 depends, to more clearly recite aspects of the invention.

Shan, Masuda, Collins and *Reimold* do not, individually or in combination, teach, show or suggest all of the limitations of independent claim 25. *Shan, Masuda, Collins* and *Reimold* have been discussed above. The combination of *Shan, Masuda, Collins* and *Reimold* does not teach, show or suggest a liner having an annular base for substantially covering the bottom of a processing chamber, wherein a first cylindrical wall extends from a perimeter of the base and

RESPONSE TO OFFICE ACTION
Serial No. 10/055,310
Page 28 of 40

a substantially annular passage is formed at least partially in the base, as recited by independent claim 25.

Thus, independent claim 25, and claim 27 that depends therefrom, are patentable over *Shan* in view of *Masuda* and *Collins* and further in view of *Reimold*. Accordingly, the Applicants respectfully request that the rejection to this claim be withdrawn.

N. 35 U.S.C. §103(a)

Claims 18-19

Shan in view of Masuda and further in view of Collins

Claims 18-19 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Shan* in view of *Masuda* and further in view of *Collins*. For the reasons discussed below, the Applicants respectfully disagree with this conclusion.

Shan, Masuda and Collins do not, individually or in combination, teach, show or suggest all of the limitations of independent claim 11, from which claims 18-19 depend. *Shan, Masuda and Collins* have been discussed above. The combination of *Shan, Masuda and Collins* does not teach, show or suggest a chamber liner having a base for substantially covering the bottom of a processing chamber and a substantially annular passage formed at least partially in the base, the passage being fluidly isolated from the chamber volume and adapted to circulate a fluid therethrough, as recited by independent claim 11.

Thus, independent claim 11, and claims 18-19 that depend therefrom, are patentable over *Shan* in view of *Masuda* and further in view of *Collins*. Accordingly, the Applicants respectfully request that the rejection to these claims be withdrawn.

O. 35 U.S.C. §103(a)

Claim 24

Shan in view of Masuda and further in view of Banholzer

RESPONSE TO OFFICE ACTION
Serial No. 10/055,310
Page 29 of 40

Claim 24 stands rejected under 35 U.S.C. §103(a) as being unpatentable over *Shan* in view of *Masuda* and further in view of *Banholzer*. For the reasons discussed below, the Applicants respectfully disagree with this conclusion.

Shan, *Masuda* and *Banholzer* do not, individually or in combination, teach, show or suggest all of the limitations of independent claim 11, from which claim 24 depends. *Shan*, *Masuda* and *Banholzer* have been discussed above. The combination of *Shan*, *Masuda* and *Banholzer* does not teach, show or suggest a chamber liner having a base for substantially covering the bottom of a processing chamber and a substantially annular passage formed at least partially in the base, the passage being fluidly isolated from the chamber volume and adapted to circulate a fluid therethrough, as recited by independent claim 11.

Thus, independent claim 11, and claim 24 that depends therefrom, are patentable over *Shan* in view of *Masuda* and further in view of *Banholzer*. Accordingly, the Applicants respectfully request that the rejection to this claim be withdrawn.

P. 35 U.S.C. §103(a)

Claim 32

Shan* in view of *Masuda* and *Collins* and further in view of *Banholzer

Claim 32 stands rejected under 35 U.S.C. §103(a) as being unpatentable over *Shan* in view of *Masuda* and *Collins* and further in view of *Banholzer*. For the reasons discussed below, the Applicants respectfully disagree with this conclusion.

Shan, *Masuda*, *Collins* and *Banholzer* do not, individually or in combination, teach, show or suggest all of the limitations of independent claim 25, from which claim 32 depends. *Shan*, *Masuda*, *Collins* and *Banholzer* have been discussed above. The combination of *Shan*, *Masuda*, *Collins* and *Banholzer* does not teach, show or suggest a liner having an annular base for substantially covering the bottom of a processing chamber, wherein a first cylindrical wall extends from a perimeter of the base and a substantially annular

RESPONSE TO OFFICE ACTION
Serial No. 10/055,310
Page 30 of 40

passage is formed at least partially in the base, as recited by independent claim 25.

Thus, independent claim 25, and claim 32 that depends therefrom, are patentable over *Shan* in view of *Masuda* and *Collins* and further in view of *Banholzer*. Accordingly, the Applicants respectfully request that the rejection to this claim be withdrawn.

Q. 35 U.S.C. §103(a)

Claims 37-39

Shan in view of *Masuda* or *Pu et al.*

Claims 37-39 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Shan* in view of *Masuda* or *Pu*. For the reasons discussed below, the Applicants respectfully disagree with this conclusion.

Shan, *Masuda*, and *Pu* do not, individually or in combination, teach, show or suggest all of the limitations of independent claim 37, from which claims 38-39 depend. *Shan*, *Masuda* and *Pu* have been discussed above. The combination of *Shan*, *Masuda* and/or *Pu* does not teach, show or suggest a chamber liner having a center member having a first side adapted to be exposed to the processing region, a cylindrical wall extending from the first side of the center member and adapted to line at least a portion of the walls of the chamber, and a substantially annular passage at least partially disposed in the center member and adapted to isolate a heat transfer fluid flowing therethrough from the processing volume, as recited by independent claim 37.

Thus, independent claim 37, and claims 38-39 that depend therefrom, are patentable over *Shan* in view of *Masuda* or *Pu*. Accordingly, the Applicants respectfully request that the rejection to these claims be withdrawn.

RESPONSE TO OFFICE ACTION
Serial No. 10/055,310
Page 31 of 40

R. 35 U.S.C. §103(a)

Claim 4

Pu in view of Collins

Claim 4 stands rejected under 35 U.S.C. §103(a) as being unpatentable over *Pu* in view of *Collins*. For the reasons discussed below, the Applicants respectfully disagree with this conclusion.

Pu and *Collins* do not, individually or in combination, teach, show or suggest all of the limitations of independent claim 1, from which claim 4 depends. *Pu* and *Collins* have been discussed above. *Pu* and *Collins* do not, individually or in combination, teach, show or suggest a chamber liner having a base for substantially covering a bottom of the chamber, an inner wall connected to the base and a substantially annular passage formed in the base, the inner wall or the base and the inner wall of the liner, the passage being adapted to circulate a fluid therethrough, and wherein the passage is fluidly isolated from the processing volume, as recited by independent claim 1.

Thus, independent claim 1, and claim 4 that depends therefrom, are patentable over *Pu* in view of *Collins*. Accordingly, the Applicants respectfully request that the rejection to this claim be withdrawn.

S. 35 U.S.C. §103(a)

Claims 7-10 and 38-39

Pu in view of Shan

1. Claims 7-10

Claims 7-10 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Pu* in view of *Shan*. For the reasons discussed below, the Applicants respectfully disagree with this conclusion.

Pu and *Shan* do not, individually or in combination, teach, show or suggest all of the limitations of independent claim 7, from which claims 8-10 depend. *Pu* and *Shan* have been discussed above. *Pu* and *Shan* do not, individually or in combination, teach, show or suggest a chamber liner having a center member with a cylindrical wall projecting upward therefrom and a

RESPONSE TO OFFICE ACTION
Serial No. 10/055,310
Page 32 of 40

substantially annular passage formed in the center member, the passage being fluidly isolated from the processing volume, as recited by independent claim 7.

Thus, independent claim 7, and claims 8-10 that depend therefrom, are patentable over *Pu* in view of *Shan*. Accordingly, the Applicants respectfully request that the rejection to these claims be withdrawn.

2. Claims 38-39

Claims 38-39 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Pu* in view of *Shan*. For the reasons discussed below, the Applicants respectfully disagree with this conclusion.

Pu and *Shan* do not, individually or in combination, teach, show or suggest all of the limitations of independent claim 37, from which claims 38-39 depend. *Pu* and *Shan* have been discussed above. *Pu* and *Shan* do not, individually or in combination, teach, show or a chamber liner having a center member having a first side adapted to be exposed to the processing region, a cylindrical wall extending from the first side of the center member and adapted to line at least a portion of the walls of the chamber, and a substantially annular passage at least partially disposed in the center member and adapted to isolate a heat transfer fluid flowing therethrough from the processing volume, as recited by independent claim 37.

Thus, independent claim 37, and claims 38-39 that depend therefrom, are patentable over *Pu* in view of *Shan*. Accordingly, the Applicants respectfully request that the rejection to these claims be withdrawn.

T. 35 U.S.C. §103(a)

Claims 11, 15-17, 20 and 22-23

Pu* in view of *Masuda

Claims 11, 15-17, 20 and 22-23 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Pu* in view of *Masuda*. For the reasons discussed below, the Applicants respectfully disagree with this conclusion.

RESPONSE TO OFFICE ACTION
Serial No. 10/055,310
Page 33 of 40

Pu and *Masuda* do not, individually or in combination, teach, show or suggest all of the limitations of independent claim 11, from which claims 15-17, 20 and 22-23 depend. *Pu* and *Masuda* have been discussed above. *Pu* and *Masuda* do not, individually or in combination, teach, show or suggest a chamber liner having a base for substantially covering the bottom of a processing chamber and a substantially annular passage formed at least partially in the base, the passage being fluidly isolated from the chamber volume and adapted to circulate a fluid therethrough, as recited by independent claim 11.

Thus, independent claim 11, and claims 15-17, 20 and 22-23 that depend therefrom, are patentable over *Pu* in view of *Masuda*. Accordingly, the Applicants respectfully request that the rejection to these claims be withdrawn.

U. 35 U.S.C. §103(a) Claims 12, 14, 21, 25-26, 28-31 and 33-35

Pu in view of *Masuda* and further in view of *Collins*.

1. Claims 12, 14 and 21

Claims 12, 14 and 21 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Pu* in view of *Masuda* and further in view of *Collins*. For the reasons discussed below, the Applicants respectfully disagree with this conclusion.

Pu, Masuda and Collins do not, individually or in combination, teach, show or suggest all of the limitations of independent claim 11, from which claims 12, 14 and 21 depend. *Pu, Masuda and Collins* have been discussed above. *Pu, Masuda and Collins* do not, individually or in combination, teach, show or suggest a chamber liner having a base for substantially covering the bottom of a processing chamber and a substantially annular passage formed at least partially in the base, the passage being fluidly isolated from the chamber volume and adapted to circulate a fluid therethrough, as recited by independent claim 11.

Thus, independent claim 11, and claims 12, 14 and 21 that depend therefrom, are patentable over *Pu* in view of *Masuda* and further in view of

RESPONSE TO OFFICE ACTION
Serial No. 10/055,310
Page 34 of 40

Collins. Accordingly, the Applicants respectfully request that the rejection to these claims be withdrawn.

2. Claims 25-26 and 28-31

Claims 25-26 and 28-31 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Pu* in view of *Masuda* and further in view of *Collins*. For the reasons discussed below, the Applicants respectfully disagree with this conclusion.

Pu, *Masuda* and *Collins* do not, individually or in combination, teach, show or suggest all of the limitations of independent claim 25, from which claims 26 and 28-31 depend. *Pu*, *Masuda* and *Collins* have been discussed above. *Pu*, *Masuda* and *Collins* do not, individually or in combination, teach, show or suggest a liner having an annular base for substantially covering the bottom of a processing chamber, wherein a first cylindrical wall extends from a perimeter of the base and a substantially annular passage is formed at least partially in the base, as recited by independent claim 25.

Thus, independent claim 25, and claims 26 and 28-31 that depend therefrom, are patentable over *Pu* in view of *Masuda* and further in view of *Collins*. Accordingly, the Applicants respectfully request that the rejection to these claims be withdrawn.

3. Claims 33-35

Claims 33-35 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Pu* in view of *Masuda* and further in view of *Collins*. For the reasons discussed below, the Applicants respectfully disagree with this conclusion.

Pu, *Masuda* and *Collins* do not, individually or in combination, teach, show or suggest all of the limitations of independent claim 33, from which claims 34-35 depend. *Pu*, *Masuda* and *Collins* have been discussed above. *Pu*, *Masuda* and *Collins* do not, individually or in combination, teach, show or suggest a chamber liner having an annular base for substantially covering the bottom of a chamber,

RESPONSE TO OFFICE ACTION
Serial No. 10/055,310
Page 35 of 40

a first cylindrical wall coupled to an outer portion of the base for extending into the processing region along the sidewalls of the chamber, a second cylindrical wall coupled to an inner portion of the base for extending into the processing region along a substrate support positioned therein, and a substantially annular passage formed at least partially in the base and fluidly isolated from the processing region, as recited by independent claim 33.

Thus, independent claim 33, and claims 34-35 that depend therefrom, are patentable over *Pu* in view of *Masuda* and further in view of *Collins*. Accordingly, the Applicants respectfully request that the rejection to these claims be withdrawn.

V. 35 U.S.C. §103(a)

Claims 6, 13 and 27

Pu in view of *Masuda* and *Collins* and further in view of *Reimold*

1. Claim 6

Claim 6 stands rejected under 35 U.S.C. §103(a) as being unpatentable over *Pu* in view of *Masuda* and *Collins* and further in view of *Reimold*. For the reasons discussed below, the Applicants respectfully disagree with this conclusion.

Pu, *Masuda*, *Collins* and *Reimold* do not, individually or in combination, teach, show or suggest all of the limitations of independent claim 1, from which claim 6 depends. *Pu*, *Masuda*, *Collins* and *Reimold* have been discussed above. *Pu*, *Masuda*, *Collins* and *Reimold* do not, individually or in combination, teach, show or suggest a chamber liner having a base for substantially covering a bottom of the chamber, an inner wall connected to the base and a substantially annular passage formed in the base, the inner wall or the base and the inner wall of the liner, the passage being adapted to circulate a fluid therethrough, and wherein the passage is fluidly isolated from the processing volume, as recited by independent claim 1.

Thus, independent claim 1, and claim 6 that depends therefrom, are patentable over *Pu* in view of *Masuda* and *Collins* and further in view of *Reimold*.

RESPONSE TO OFFICE ACTION

Serial No. 10/055,310

Page 36 of 40

Accordingly, the Applicants respectfully request that the rejection to this claim be withdrawn.

2. Claim 13

Claim 13 stands rejected under 35 U.S.C. §103(a) as being unpatentable over *Pu* in view of *Masuda* and *Collins* and further in view of *Reimold*. For the reasons discussed below, the Applicants respectfully disagree with this conclusion.

Pu, Masuda, Collins and *Reimold* do not, individually or in combination, teach, show or suggest all of the limitations of independent claim 11, from which claim 13 depends. *Pu, Masuda, Collins* and *Reimold* have been discussed above. *Pu, Masuda, Collins* and *Reimold* do not, individually or in combination, teach, show or suggest a chamber liner having a base for substantially covering the bottom of a processing chamber and a substantially annular passage formed at least partially in the base, the passage being fluidly isolated from the chamber volume and adapted to circulate a fluid therethrough, as recited by independent claim 11.

Thus, independent claim 11, and claim 13 that depends therefrom, are patentable over *Pu* in view of *Masuda* and *Collins* and further in view of *Reimold*. Accordingly, the Applicants respectfully request that the rejection to this claim be withdrawn.

3. Claim 27

Claim 27 stands rejected under 35 U.S.C. §103(a) as being unpatentable over *Pu* in view of *Masuda* and *Collins* and further in view of *Reimold*. For the reasons discussed below, the Applicants respectfully disagree with this conclusion.

Pu, Masuda, Collins and *Reimold* do not, individually or in combination, teach, show or suggest all of the limitations of independent claim 25, from which claim 27 depends. *Pu, Masuda, Collins* and *Reimold* have been discussed above. *Pu, Masuda, Collins* and *Reimold* do not, individually or in combination,

RESPONSE TO OFFICE ACTION
Serial No. 10/055,310
Page 37 of 40

teach, show or suggest a liner having an annular base for substantially covering the bottom of a processing chamber, wherein a first cylindrical wall extends from a perimeter of the base and a substantially annular passage is formed at least partially in the base, as recited by independent claim 25.

Thus, independent claim 25, and claim 27 that depends therefrom, are patentable over *Pu* in view of *Masuda* and *Collins* and further in view of *Reimold*. Accordingly, the Applicants respectfully request that the rejection to this claim be withdrawn.

W. 35 U.S.C. §103(a)

Claims 18-19

Pu* in view of *Masuda* and further in view of *Collins

Claims 18-19 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Pu* in view of *Masuda* and further in view of *Collins*. For the reasons discussed below, the Applicants respectfully disagree with this conclusion.

Pu, *Masuda* and *Collins* do not, individually or in combination, teach, show or suggest all of the limitations of independent claim 11, from which claims 18-19 depend. *Pu*, *Masuda* and *Collins* have been discussed above. *Pu*, *Masuda* and *Collins* do not, individually or in combination, teach, show or suggest a chamber liner having a base for substantially covering the bottom of a processing chamber and a substantially annular passage formed at least partially in the base, the passage being fluidly isolated from the chamber volume and adapted to circulate a fluid therethrough, as recited by independent claim 11.

Thus, independent claim 11, and claims 18-19 that depend therefrom, are patentable over *Pu* in view of *Masuda* and further in view of *Collins*. Accordingly, the Applicants respectfully request that the rejection to these claims be withdrawn.

RESPONSE TO OFFICE ACTION
Serial No. 10/055,310
Page 38 of 40

X. 35 U.S.C. §103(a)

Claim 24

Pu in view of Masuda and further in view of Banholzer

Claim 24 stands rejected under 35 U.S.C. §103(a) as being unpatentable over *Pu* in view of *Masuda* and further in view of *Banholzer*. For the reasons discussed below, the Applicants respectfully disagree with this conclusion.

Pu, Masuda, and Banholzer do not, individually or in combination, teach, show or suggest all of the limitations of independent claim 11, from which claim 24 depends. *Pu, Masuda, and Banholzer* have been discussed above. *Pu, Masuda, and Banholzer* do not, individually or in combination, teach, show or suggest a chamber liner having a base for substantially covering the bottom of a processing chamber and a substantially annular passage formed at least partially in the base, the passage being fluidly isolated from the chamber volume and adapted to circulate a fluid therethrough, as recited by independent claim 11.

Thus, independent claim 11, and claim 24 that depends therefrom, are patentable over *Pu* in view of *Masuda* and further in view of *Banholzer*. Accordingly, the Applicants respectfully request that the rejection to this claim be withdrawn.

Y. 35 U.S.C. §103(a)

Claim 32

Pu in view of Masuda and Collins and further in view of Banholzer

Claim 32 stands rejected under 35 U.S.C. §103(a) as being unpatentable over *Pu* in view of *Masuda* and *Collins* and further in view of *Banholzer*. For the reasons discussed below, the Applicants respectfully disagree with this conclusion.

Pu, Masuda, Collins and Banholzer do not, individually or in combination, teach, show or suggest all of the limitations of independent claim 25, from which claim 32 depends. *Pu, Masuda, Collins and Banholzer* have been discussed above. *Pu, Masuda, Collins and Banholzer* do not, individually or in combination,

RESPONSE TO OFFICE ACTION
Serial No. 10/055,310
Page 39 of 40

teach, show or suggest a liner having an annular base for substantially covering the bottom of a processing chamber, wherein a first cylindrical wall extends from a perimeter of the base and a substantially annular passage is formed at least partially in the base, as recited by independent claim 25.

Thus, independent claim 25, and claim 32 that depends therefrom, are patentable over *Pu* in view of *Masuda* and *Collins* and further in view of *Banholzer*. Accordingly, the Applicants respectfully request that the rejection to this claim be withdrawn.

CONCLUSION

The Applicants submit that all claims now pending are in condition for allowance. Accordingly, both reconsideration of this application and swift passage to issue are earnestly solicited.

If the Examiner believes that any unresolved issues still exist, it is requested that the Examiner telephone Keith Taboada at (732) 530-9404 so that appropriate arrangements can be made for resolving such issues as expeditiously as possible.

Respectfully submitted,

July 22, 2003


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RESPONSE TO OFFICE ACTION
Serial No. 10/055,310
Page 40 of 40CERTIFICATE OF TRANSMISSION UNDER 37 C.F.R. 1.8

I hereby certify that this correspondence is being transmitted by facsimile under 37 C.F.R. §1.8 on 7-22-03 and is addressed to Mail Stop Non-Fee Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, Facsimile No: (703) 872-9310.

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